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MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

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Division Opinion

Inquiry: 2008-07

Subject: Garage Attic Access

Code: 2006 International Residential Code
2007 Minnesota State Building Code chapter 1305

Submitted By: 10,000 Lakes Chapter of the International Code Council
Uniformity of Inspections Committee

Approved By: Thomas Anderson, State Building Official

Issue Date: Aug. 1, 2008

Question: If a garage ceiling is considered to be part of the element that provides the required separation between the garage and the dwelling(s) (R309.2 and R317) and there is a need for access, does R309.1 apply?

Answer: No. Section R309.1 of the 2006 International Residential Code (IRC) identifies requirements for openings to sleeping rooms and other openings between the residence and the garage, not the garage and attic An attic access as regulated in IRC Section R807 is intended to provide access to an attic area in the likelihood that repairs to plumbing, electrical or mechanical system may occur during the life of the structure.

Background Information: Properly constructed attic access panels have been located in garage separation ceilings without jeopardizing the required fire separation between the dwelling unit and garage.

Typically attic access panels are constructed of either ½" or $^{5}/_{8}$" gypsum board material with a backing material of ½" to ¾" structural wood panel. The access panel can be supported on gypsum board ledge created within the ceiling framing members so that all elements of the access opening maintain the required fire separation between the garage and attic area.

Discussion:

Section 711.3.1 of the 2006 International Building Code (IBC) identifies requirements for lay-in ceiling panels used as part of fire-resistance-rated floor/ceiling assemblies. Although the fire separation required in IRC R309.2 is not a fire-resistance-rated assembly, IBC 711.3.1 offers an acceptable method of compliance for attic access panel construction. IBC Section 711.3.1 states that if a ceiling panel is incapable of resisting an upward force of 1 lb/ft^2 then the ceiling panel would require a restraining method to prevent vertical displacement under such upward force.

An attic access panel having ½" or $^{5}/_{8}$" gypsum board will weigh 2.2 psf to 2.75 psf respectfully. A backing material of ½" or ¾" plywood will have a weight of 1.6 psf to 2.4 psf. That known, an attic access panel constructed with ½" gypsum board with a ½" plywood backer will weigh approximately 3.8 psf, which exceeds the 1 lb/ft^2 upward force to prevent vertical displacement of the attic access panel. Similarly, $^{5}/_{8}$" gypsum board with ½" backing will weigh approximately 4.35 psf.

Source of material weights: Table C3-1 Minimum Design Dead Loads from the Minimum Design Loads for Buildings and Other Structures published by the American Standard of Civil Engineers.